

REMARKS

The present invention is directed to a soundproofing and thermally insulating element which includes a panel of rigid polyurethane foam with greater than 90% closed cell content. The surface of this panel must have from 1 to 18 depressions per square centimeter. These depressions must have a diameter of from 0.1 to 10 mm and a depth of from 10 to 70 mm. At least two types of depressions which differ in at least one dimension must be present.

Claims 1-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lee et al (U.S. Patent 5,770,635) in view of Becker et al (U.S. 2002/0179367). Applicants respectfully traverse this rejection.

Lee et al discloses dimensionally stable rigid polyurethane foams made from specified types of materials which are useful in the automotive industry as headrests, bumpers, internal paneling and as shoe soles.

Lee et al does not teach anything with respect to sound absorption. One skilled in the art seeking an improved sound absorbing foam would not therefore consider the Lee et al disclosure to be any more pertinent to his/her problem than the thousands of other foam patents. That skilled artisan would not therefore be led by the teachings of Lee et al to select any of that reference's teachings with the expectation of achieving an improved sound absorbing foam.

Further, Lee et al does not teach or suggest that the disclosed foams must have any surface depressions much less the number of depressions per square centimeter, size of depressions or number of types of depressions required in Applicant's claimed invention.

Becker et al discloses sound-absorbing polymer foam molded articles in which the skin of the molded foam is perforated.

Becker et al does not teach or suggest that two different types of perforations (i.e., perforations of at least two different sizes) should be used much less that use of such different types of perforations would improve sound absorption.

Applicant's claimed invention requires two different sizes of depressions. The significance of the use of such different sized depressions in the numbers required

by Applicant's claims is demonstrated in the examples of the invention and the comparative examples given in the specification.

Neither Lee et al nor Becker et al teaches or suggests foams having two different sizes of depressions. Nor is there any teaching in either of these references which would lead one skilled in the art to expect that use of at least two different-sized depressions would improve the sound absorbing capability of a foam such as that claimed by Applicant.

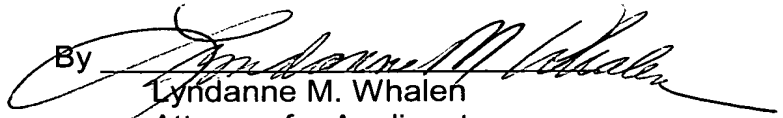
The teachings of Lee et al and Becker et al can not therefore be combined in any manner which would render Applicants' claimed invention obvious.

Withdrawal of this rejection is therefore requested.

The Handscomb (U.S. 6,033,756) and Müller et al (U.S. 6,075,064) disclosures which were made of record but appropriately not applied have been noted.

In view of the above remarks, reconsideration and allowance of Claims 1-10 are respectfully requested.

Respectfully submitted,

By 
Lyndanne M. Whalen
Attorney for Applicant
Reg. No. 29,457

Bayer MaterialScience LLC
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-3843
FACSIMILE PHONE NUMBER:
(412) 777-3902

f:\shared\kpl\lmw187.res